REMARKS/ARGUMENTS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 1-23 and 27-30 are presently pending in this case. Claims 1, 16-18, and 20-22 are amended by the present amendment. As amended Claims 1, 16-18, and 20-22 are supported by the original disclosure,[1] no new matter is added.

In the outstanding Official Action, Claims 21 and 23 were rejected under 35 U.S.C. §101; the specification was objected to; Claim 18 was rejected under 35 U.S.C. §112, second paragraph; Claims 1-4, 6, 8-17, 20-23, and 27-30 were rejected under 35 U.S.C. §102(b) as anticipated by Kohonen et al. ("Self Organization of a Massive Document Collection," hereinafter "Kohonen"); Claims 5 and 7 were rejected under 35 U.S.C. §103(a) as unpatentable over Kohonen in view of Hamilton et al. (U.S. Patent No. 6,874,109, hereinafter "Hamilton"); and Claims 18 and 19 were rejected under 35 U.S.C. §103(a) as unpatentable over Kohonen in view of Derthick ("Interface for Palmtop Image Search").

With regard to the rejection of Claims 21 and 23 under 35 U.S.C. §101, it is respectfully noted that Claim 21 is a method claim having two steps: "storing" and "transmitting," contrary to the assertion in the outstanding Office Action that "They are clearly not a series of steps."[2] With regard to the use of the term "logic," it is respectfully noted that this is not one of the steps of the claim, but is simply recited in the preamble. Further, in determining the scope of the claims prior to determining compliance with each statutory requirement for patentability, MPEP §2106 provides:

> Office personnel are to correlate each claim limitation to all portions of the disclosure that describes the claim limitation. ***This is to be done in all cases***, i.e., whether or not the claimed invention is defined using means or step plus function language. The correlation step will

[1]See, e.g., the specification at page 14, lines 3- 31.
[2]See the outstanding Office action at page 2, line 25.

> ensure that office personnel will correctly interpret each claim limitation. (emphasis added).

Thus, it is respectfully submitted that the rejection under 35 U.S.C. §101 of Claims 21 and 23 are improper as these claims clearly recite method steps.

MPEP §2106 further provides that:

> Office personnel have the burden to establish a *prima facie* case that the claimed invention as a whole is directed to solely an abstract idea or to manipulation of abstract ideas or does not produce a useful result. Only when the claim is devoid of any limitations to a practical application in a technological arts should it be rejected under 35 U.S.C. § 101 . . . Further, when such a rejection is made, office personnel must expressly state how the language of the claims has been interpreted to support the rejection. (emphasis added) See MPEP § 2106.

The Advisory Action dated December 7, 2007 merely includes the conclusory statement that "logic is directed towards non-statutory subject matter. Thus, it is respectfully submitted that no express statement has been provided as to how the language of the claims have been interpreted to support the 35 U.S.C. §101 rejection in violation of the guidelines of MPEP §2106.

Accordingly, should such a rejection be maintained in a subsequent communication with respect to any of the aforementioned claims, it is respectfully requested the Examiner provide an express statement on the record in accordance with MPEP §2106 guidelines explaining how such claim terminology, such as "storing," "generating," and "transmitting" is interpreted. More specifically, how such limitations are deficient to define a useful, concrete and tangible result. See *State Street Bank & Trust Co. v. Signature Financial Group, Inc.*, 149 F.3d 1368, 1374, 47 (Fed. Cir. 1998) (discussing practical application of a mathematical algorithm, formula, or calculation.).

Finally, with respect to Claim 23, it is respectfully noted that computer programs are often recited as part of a claim. U.S.P.T.O. personnel should determine whether the computer program is being claimed **as part of an otherwise statutory manufacture or machine**. In

such a case, the claim **remains statutory irrespective of the fact that a computer program is included in the claim**.[3]

As a process or method is a statutory class of subject matter, it is respectfully submitted that Claim 21, and Claim 23 (an article of manufacture) dependent therefrom, are in compliance with all requirements under 35 U.S.C. §101.

With regard to the objection to the specification, it is respectfully noted that metadata is discussed at least on page 4, lines 28 and 38, and feature vectors are discussed at least at page 5, line 14 and in Figure 2. Accordingly, the objection to the specification is believed to be overcome.

With regard to the rejection of Claim 18 under 35 U.S.C. §112, second paragraph, Claim 18 is amended to recite "a portable data processing device." Accordingly, Claim 18 is believed to be compliant with all requirements under 35 U.S.C. §112, second paragraph.

With regard to the rejection of Claims 1-4, 6, 8-17, and 20-26 as anticipated by Kohonen, that rejection is respectfully traversed.

Amended Claim 1 recites in part:

> a data network;
> an information retrieval client system connected to said data network; and
> a plurality of information item storage nodes connected to the data network,
> wherein ***each storage node comprises a store configured to store a plurality of information items and an indexer, the indexer configured to derive data representing an information item, the data representing the information item, when stored, requiring less storage capacity than a corresponding information item, the indexer further configured to send the data representing the information item to the client system via said data network***, and
> said client system includes a node position generating unit configured to generate a node position in respect of each information item represented by said received data responsive

[3] *See* Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility, USPTO 2005 (Annex IV, Computer Related Non-Statutory Subject Matter) page 53

to the data representing the information item received from said indexer of a storage node.

The outstanding Office Action appears to be interpreting the databases from which the patent abstracts are obtained[4] as the "storage nodes" recited in Claim 1.[5] The outstanding Office Action therefore appears to be interpreting the SGI workstation[6] as the "client system." Furthermore, the outstanding Office Action then asserts that the databases must transmit the data via a data network.[7]

However, is respectfully submitted that Kohonen does not describe "storage nodes" as recited in amended Claim 1. In this regard, Kohonen explicitly states the patent abstracts were "***available on CD-ROMs or other electronic media***,"[8] and thus the "storage nodes" cited in the outstanding Office Action cannot include an "indexer configured to derive data representing an information item, the data representing the information item, when stored, requiring less storage capacity than a corresponding information item."

Further, Kohonen does not describe that the data was transmitted over a network (as recited in Claim 1), and it is respectfully submitted the data was merely loaded onto the SGI workstation using a suitable media reader.

In this regard, it is noted that Kohonen states that processing is carried out on the raw patent abstracts.[9] In other words, even if the databases in Kohonen were stored on, for example, a network server that transmits data to the workstation, the data that would be transmitted would be the ***raw*** data stored in the database rather than data derived ***by the server*** from the information items stored in the database. Thus, such he server would not be a "storage node" as recited in amended Claim 1.

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[4]See page 581 of Kohonen, V. The Document Map of all Electronic Patent Abstracts.
[5]See the outstanding Office Action at page 4, lines 12-30.
[6]See page 582 of Kohonen, section V.C Formation of the Document Map.
[7]See the outstanding Office Action at page 4, lines 8-12.
[8]See page 575 of Kohonen, Section B — Scope of this Work, fifth paragraph, lines 9-12.
[9]See page 581 of Kohonen, Section V.A — Preprocessing.

Furthermore, Kohonen states that ***the whole process of computation*** of the document map takes about six weeks on a six-processor SGI O2000 computer.[10] This includes any pre-processing that may be carried out,[11] thereby implying that data is ***not*** derived by the database from information items stored in the database. Thus, in Kohonen, all the processing is carried out by the SGI workstation ***as a single system after receiving only raw data, not data representing the information item, when stored, requiring less storage capacity than a corresponding information item***. Thus, not only does Kohonen fail to teach or suggest the elements of amended Claim 1, Kohonen teaches away from the claimed invention because all the processing necessary to calculate the SOM is carried out by ***the same system***.

By way of contrast, embodiments of the present invention store information items at storage nodes, which derive data representing the information item which, when stored, require less storage capacity than the corresponding information item. The storage nodes then send the data representing information item to the client system. This advantageously reduces the network traffic between the storage nodes and the client system and reduces the overall processing overhead at the client system. These advantages are simply not provided by a single system arrangement such as that disclosed by Kohonen.

Consequently, as Kohonen at least does not teach "storage nodes" as defined in Claim 1, Claim 1 (and Claims 2-15 dependent therefrom) is not anticipated by Kohonen and is patentable thereover.

In a similar manner, the "store" of Claim 16, the "node position generating unit" of Claim 17, the "storing," "generating data," "transmitting," and "generating a node position" of Claim 20, the "generating data" of Claim 21, and the "generating a node position" of Claim 22 are not believed to be described by Kohonen either. Accordingly, Claims 16-23 are also not anticipated by Kohonen and are patentable thereover.

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[10]See page 582 of Kohonen, Section V.C — Formation of the Document Map.
[11]See page 581 of Kohonen, Section V.A — Preprocessing.

With regard to the rejection of Claims 5 and 7 as unpatentable over Kohonen in view of Hamilton, it is noted that Claims 5 and 7 are dependent from Claim 1, and thus are believed to be patentable for at least the reasons discussed above. Further, it is respectfully submitted that Hamilton does not cure any of the above-noted deficiencies of Kohonen. Accordingly, it is respectfully submitted that Claims 5 and 7 are patentable over Kohonen in view of Hamilton.

With regard to the rejection of Claims 18 and 19 as unpatentable over Kohonen in view of Derthick, it is noted that Claims 18 and 19 are dependent from Claim 17, and thus are believed to be patentable for at least the reasons discussed above. Further, it is respectfully submitted that Derthick does not cure any of the above-noted deficiencies of Kohonen. Accordingly, it is respectfully submitted that Claims 18 and 19 are patentable over Kohonen in view of Derthick.

Accordingly, the pending claims are believed to be in condition for formal allowance. An early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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